



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,747	01/23/2002	Lixiao Wang	S63.2-10062	7360

490 7590 09/10/2004

VIDAS, ARRETT & STEINKRAUS, P.A.
6109 BLUE CIRCLE DRIVE
SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/055,747

Applicant(s)

WANG ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-27 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-27 and 29-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

1. Claims 1-13, 15-27 and 29-34 are pending.
2. Claims 14 and 28 have been cancelled.

Claim Objections

3. Claim 16 objected to because of the following informalities: it is uncaptioned.
Appropriate correction is required.

Rejections Maintained

4. The 35 USC 112 rejection of claims 1-13, 15-27 and 29-34, as set out in section 6 of the 19 April 2004 office action, is maintained for reasons of record.
5. The 35 USC 103 rejection of claims 1-13, 15-27 and 29-34, as unpatentable over Chen et al (US 5,554,120) in view of Loontjens et al (US 6,228,980), as expressed in section 9 of the 19 April 2004 office action, is maintained for reasons of record.

Response to Arguments

6. Applicant's arguments filed in the 19 July 2004 response have been fully considered but they are not persuasive.

The arguments will be responded to in the order in which they were presented.

On page 9 of the response, applicant argues that the term "melt mixture product" is not indefinite because it covers a melt mixture, and a "melt mixture" is readily understandable because there are 177 US patents that use the term in their claims.

First of all "melt mixture product" and "melt mixture" are not the same term.

Art Unit: 1772

Secondly, assuming, arguendo, that they are the same, the 177 US patents that recited "melt mixture" in their claims, may have contained claim language that defined the term. Applicant has recited no such language.

The Examiner notes that the term "melt mixture product" seems to be a hybrid in that it attempts to encompass both unreacted mixtures and reaction products. Since the specification teaches, at page 9, lines 3-9, that the reagents in the mixture are actually reacted, the term "reaction product" (assuming that that term is supported by the original disclosure) would be more appropriate.

If the chain extender and the polymer with which it is mixed do not react, then why use the term "product" at all?

Note that adding the phrase "of a melt mixture" to "melt mixture product" does not render the original phrase more definite. It simply adds complicated language to the claims when the use of "product" or "mixture", as appropriate, would be more definite.

On pages 9 and 10, applicant argues that Chen's medical devices are made from compositions that do not include chain extenders.

However, the examiner sees no support in Chen's patent for this assertion. The fact that Chen does not mention chain extenders does not mean that his polyesters/polyamides have not been chain extended. It certainly does not teach away from the use of chain-extended polymers.

Furthermore, Chen teaches polyamides that are block copolymers (col. 5, lines 37-37). Since reacting pre-formed polymer chains makes block copolymers, Chen's

Art Unit: 1772

teaching of block copolymers is deemed to suggest that chain-lengthened polymers can be used.

Lastly, it is noted that the 35 USC 103 rejection is based upon the combined teachings of Chen and Loontjens and that Loontjens teaches chain-extended polyesters and polyamides. Arguing that Chen does not teach chain-extended polymers does not render the combination rejection improper.

Finally applicants argue, on page 10, that “. . . those components specifically recited in the claims are components for the final melt”.

Note: It is unclear to the examiner which rejection this argument is addressing.

However, the specification teaches, at page 9, lines 3-9, that the reagents in the mixture are actually reacted. This statement is inconsistent with the argument that the “final melt” contains only components, since reaction will have occurred—at least to some extent—so that the melt contains the components along with their reaction products.

Note, too, that applicant argues, on page 9, fourth full paragraph, second sentence, that “Some, none, or all of the recited components of the melt mixture may have reacted to [sic] other components at the time of the melt mixture product”. It appears, then, that reaction is the purpose for making the mixture and that higher molecular weight reaction products, not just physical mixtures of extenders and polymers, are used to make the claimed devices.

Both rejections are maintained.

Art Unit: 1772

Final Rejection

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication should be addressed to Sandra M. Nolan, at telephone number 571/272-1495. She can normally be reached Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the examiner are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498.

The fax number for patent application documents is 703/872-9306.



S. M. Nolan
Primary Examiner
Technology Center 1700

10055747(20040903)